Fig. 1

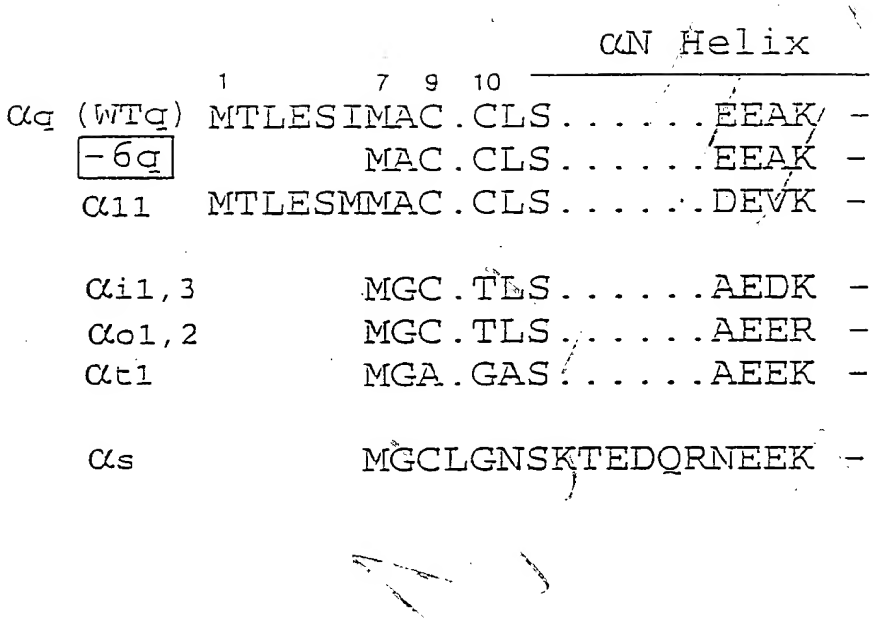
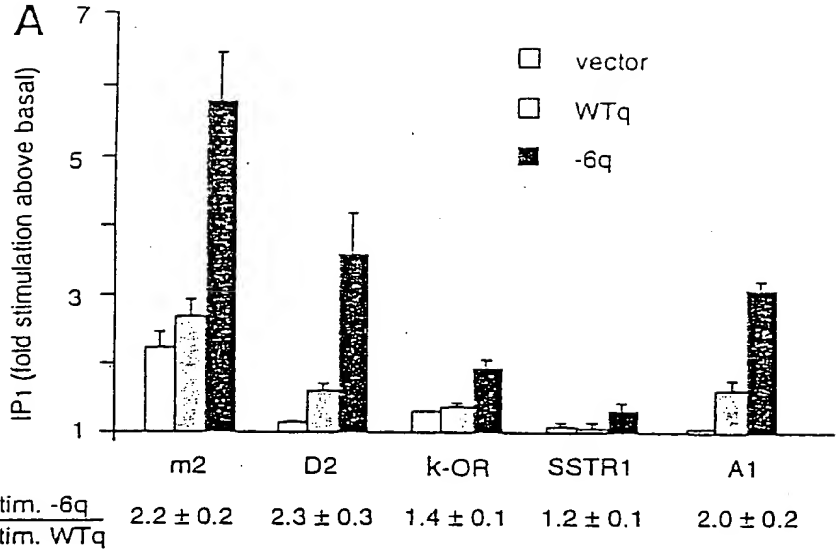
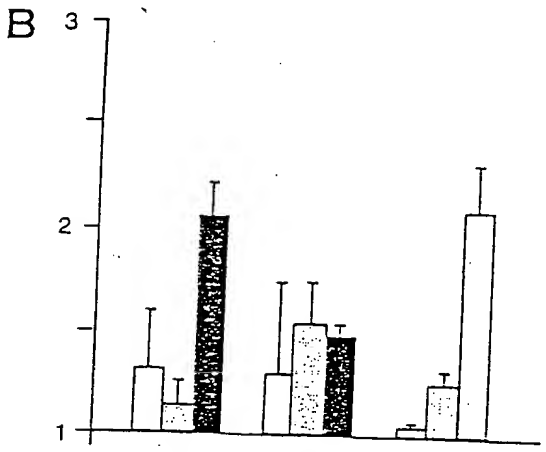

αN Helix
1 7 9 10
αq (WTq) MTLESIMAC.CLS.....EEAK -
-6q MAC.CLS.....EEAK -
α11 MTLESMMAC.CLS.....DEVK -
αi1,3 MGC.TLS.....AEDK -
αo1,2 MGC.TLS.....AEER -
αt1 MGA.GAS.....AEEK -
αs MGCLGNSKTEDQRNEEK -

Fig. 2



	m2	D2	k-OR	SSTR1	A1
Fold stim. -6q / Fold stim. WTq	2.2 ± 0.2	2.3 ± 0.3	1.4 ± 0.1	1.2 ± 0.1	2.0 ± 0.2



	D1	V2	β2
Fold stim. -6q / Fold stim. WTq	1.8 ± 0.1	1.0 ± 0.1	1.7 ± 0.1

Fig. 3

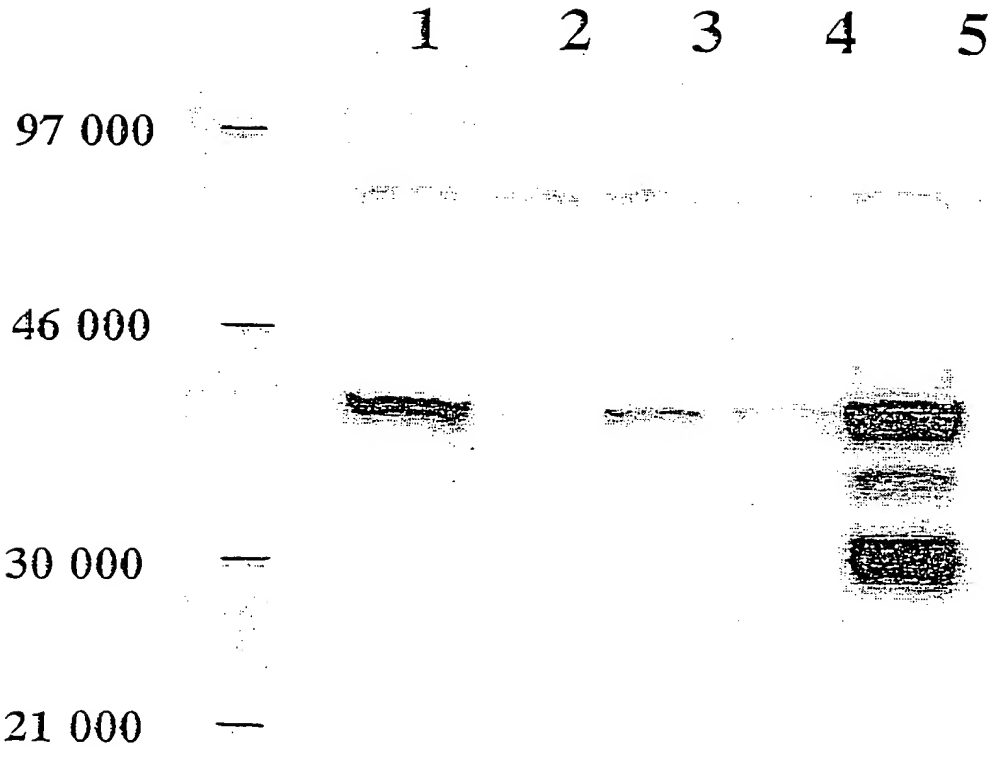


Fig. 4

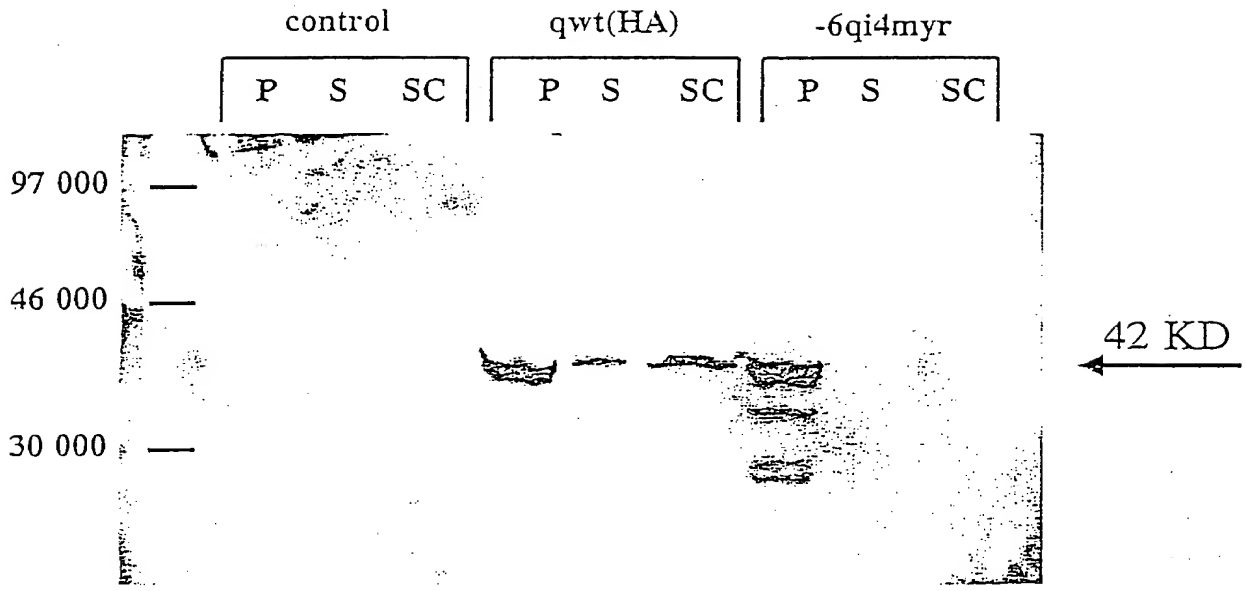
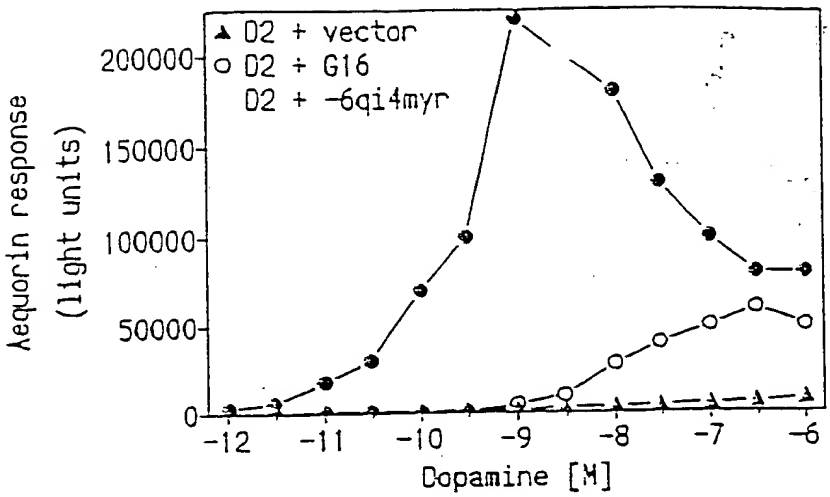
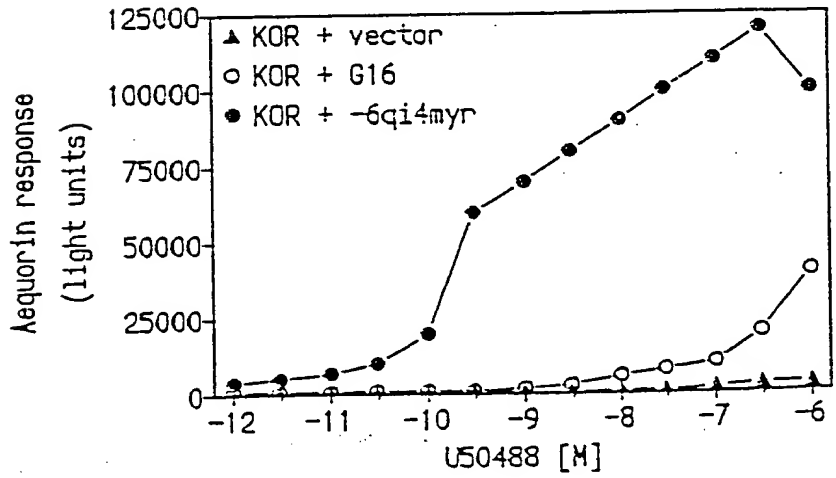

control
qwt(HA)
-6qi4myr
P S SC
P S SC
P S SC
97 000
46 000
30 000
42 KD

Fig. 5


▲ D2 + vector
o D2 + G16
D2 + -6qi4myr
Aequorin response (light units)
200000
150000
100000
50000
0
-12
-11
-10
-9
-8
-7
-6
Dopamine [M]


▲ KOR + vector
o KOR + G16
● KOR + -6qi4myr
Aequorin response (light units)
125000
100000
75000
50000
25000
0
-12
-11
-10
-9
-8
-7
-6
U50488 [M]

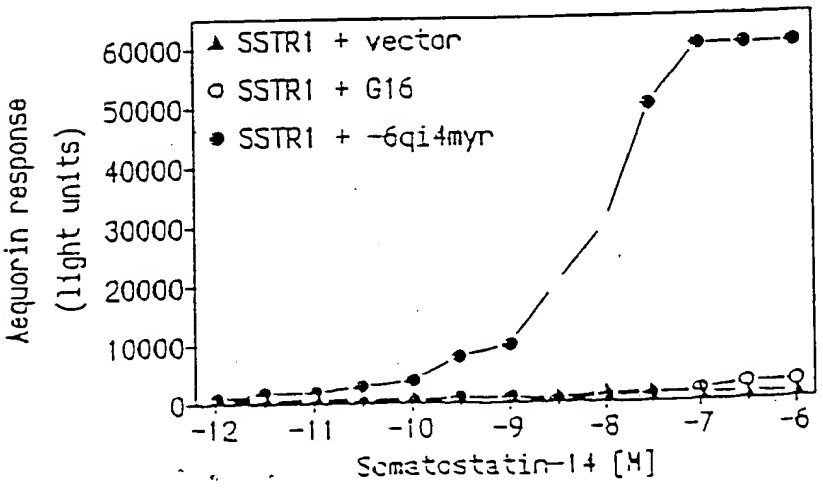
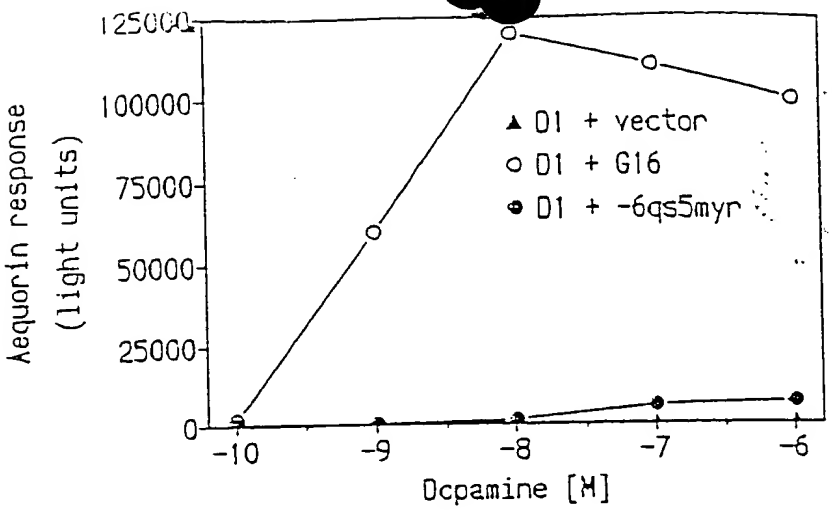
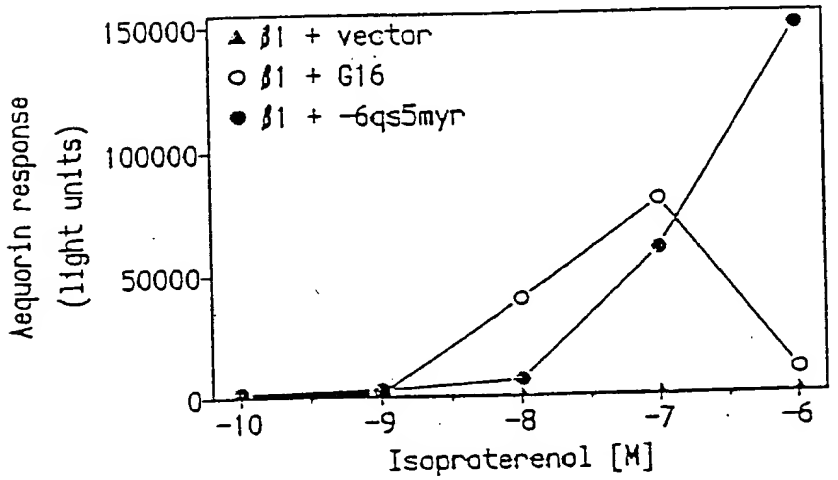

▲ SSTR1 + vector
o SSTR1 + G16
● SSTR1 + -6qi4myr
Aequorin response (light units)
60000
50000
40000
30000
20000
10000
0
-12
-11
-10
-9
-8
-7
-6
Somatostatin-14 [M]

Fig. 6


125000
100000
75000
50000
25000
0
Aequorin response (light units)
D1 + vector
D1 + G16
D1 + -6qs5myr
-10
-9
-8
-7
-6
Dopamine [M]


150000
100000
50000
0
Aequorin response (light units)
β1 + vector
β1 + G16
β1 + -6qs5myr
-10
-9
-8
-7
-6
Isoproterenol [M]

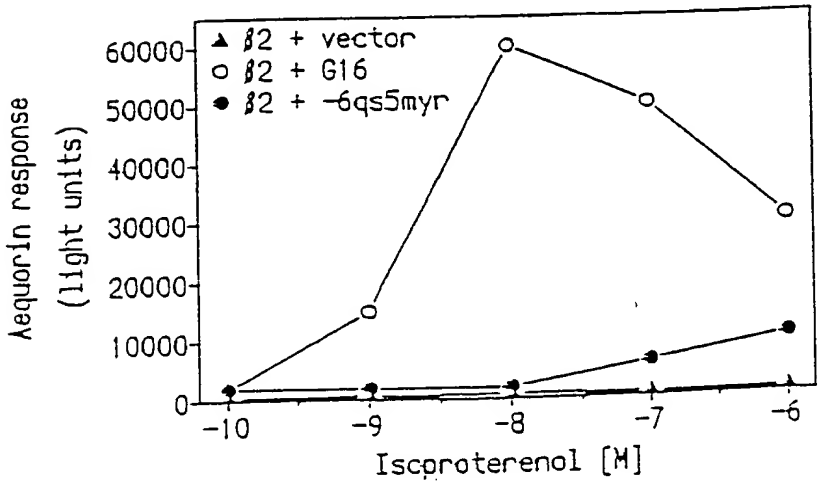
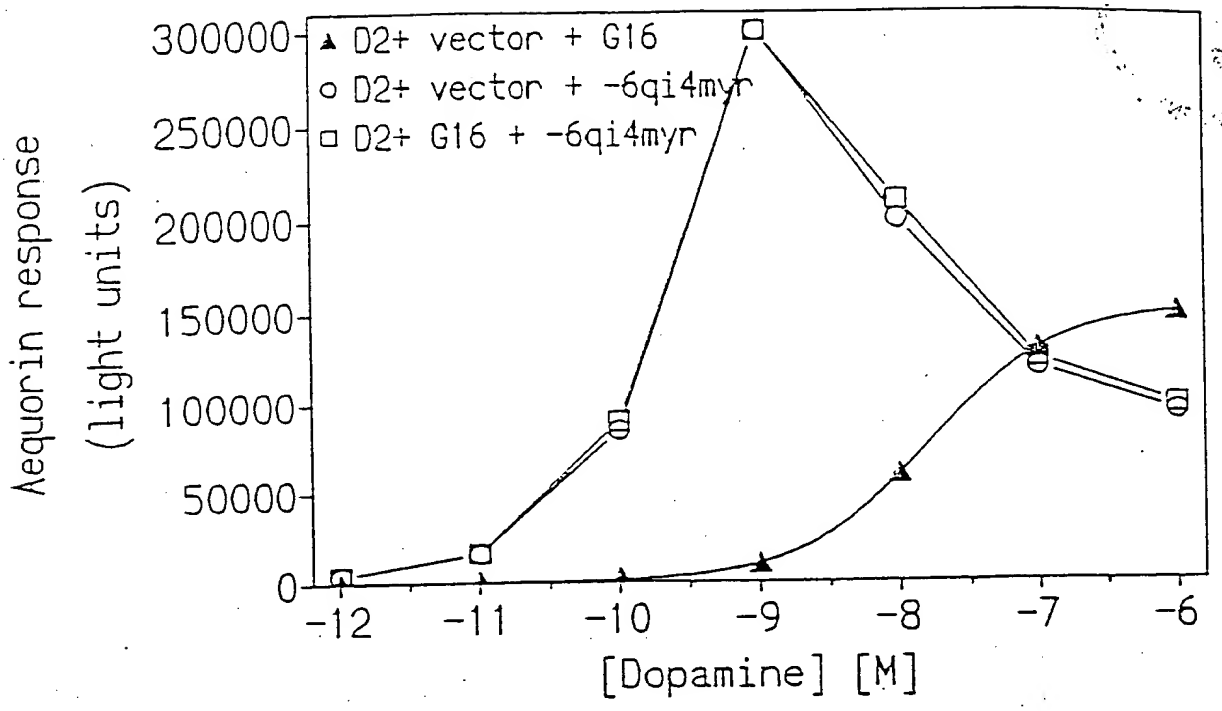

60000
50000
40000
30000
20000
10000
0
Aequorin response (light units)
β2 + vector
β2 + G16
β2 + -6qs5myr
-10
-9
-8
-7
-6
Isoproterenol [M]

Fig. 7


▲ D2+ vector + G16
○ D2+ vector + -6qi4myr
□ D2+ G16 + -6qi4myr
Aequorin response
(light units)
300000
250000
200000
150000
100000
50000
0
-12
-11
-10
-9
-8
-7
-6
[Dopamine] [M]